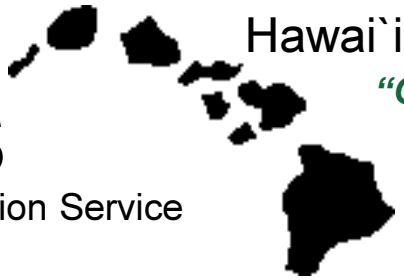




Natural Resources Conservation Service

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Hawai'i

*"Our People...
Our Islands...
In Harmony"*

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Conservation Update

Emergency Watershed Protection (EWP) Assistance Provided to the Big Island

Severe flooding in the city of Hilo, south to the town of Naalehu, occurred as a result of heavy rains on the Big Island from November 1 - 3, 2000. Rainfall amounts were in excess of the 100-year (one percent) event. Over 300 homes and businesses were flooded with total damages estimated to be over \$20 million. Six bridges were washed-out on State Highway 11 isolating the community of Pahala. Runoff from the storm

resulted in flooded homes and businesses, and property damage due to erosion and debris. Since the flooding, the Natural Resources Conservation Service has investigated more than 30 sites and completed 11 Damage Survey Reports with construction costs estimated to be \$1.5 million.

Landowners who have experienced severe property damage due to the flooding may be eligible for assistance through the Emergency Watershed Protection (EWP) program. This program helps protect lives and property threatened by natural disasters. The Natural Resources Conservation Service provides technical and financial assistance to preserve life and property that is in imminent danger by excessive erosion and flooding.



Damage to slope protection upstream of Kawaihine Bridge.



*Damage to
new geoweb
slope
protection
on Waiakea
Stream near
Puhau
Street.*



*Damage to slope protection on both
sides of stream.*



Damage to slope stabilization downstream of Kaumana Drive near Chong Street.

Two existing PL-566 Watershed Projects (Watershed Protection and Prevention Act, Public Law 83-566) in the South Hilo and Ka'u Districts prevented further flood damage from the storm. These projects protected two rural communities from more extensive damage due to this flood event.

Diversion #4 of the Wailuku-Alenaio Watershed project extends along the uphill side of a portion of Akolea Road and channels floodwater to the Wailuku River. The diversion was constructed in 1980, and was extended in 1981. The operation of this diversion prevented flooding along Ainako Stream in the areas around Ainako and Waiuanuenue Avenues. This structure which is designed to handle a 100-year storm event, flowed at its full capacity indicating the intensity of the storm and the magnitude of the potential flood damage that was averted.

The Naalehu Watershed Project, which consists of a sediment basin and an outlet channel, protected the Mamalahoa Highway below the town of Naalehu and residential and business developments along the highway. These structures control the runoff and sediment discharge from the 1,200-acre watershed. There were no reports of damage to the watershed project structures that were installed during the mid-1960s, or to the area protected by the structures.



Damage to streambank downstream of Kaumana Drive near Chong Street.



Slope protection damage on Palai Stream upstream of Olu Street.

The heavy rains hit two NRCS Environmental Quality Incentive Program (EQIP) priority areas that have been identified by local work groups. Visits to landowners who have applied Natural Resources Conservation Service conservation practices on their land proved to be very beneficial. The conservation practices which included grassed waterways and terraces helped immensely to carry the water across their properties. NRCS' technical assistance is available to all farmers and ranchers; rural and urban communities; and local, state and federal government agencies.

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